DOCUMENT RESUME

ED 052 883 RC 005 492

AUTHOR	Sweet, James A.
TITLE	The Employment of Rural Farm Wives.
INSTITUTION	Wisconsin Univ., Madison. Inst. for Research on Poverty.
SPONS AGENCY	Office of Economic Opportunity, Washington, D.C.
PUB DATE	Aug 71
NOTE	54p.; Paper presented at 1971 Annual Meeting of Rural Sociological Society, Denver, Colorado
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	Anglo Americans, *Employment Opportunities, *Family Income, Negroes, Rural Family, *Rural Farm Residents, *Rural Urban Differences, Tables (Data), Womens Education, *Working Women

ABSTRACT

For the most part an analysis of data from the 1960 Census of Population and Housing, this paper compared the employment rates of married farm women with those of married nonfarm women, the employment rates of rural farm women in different kinds of geographic areas, and the effects of a variety of individual characteristics on the employment probability of rural farm wives. The analysis, in part, revealed that rural farm women were employed in large and growing proportions; variations in rural farm employment rates were quite similar to variations among urban women; women married to men with nonfarm jobs had higher employment rates than those in farm jobs; and there was a variation in the employment of wives of men in different kinds of farming activities. According to the analysis, further research should focus on such areas as (1) differential employment rates and patterns among different rural areas in relation to supply-and-demand factors, (2) high levels of fertility and fewer employment opportunities in rural areas, (3) employed women having jobs that are less than commensurate with their education, and (4) scarcity of professional and clerical employment opportunities in rural areas causing well-educated women to leave for the city. (JB)

ED052883

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

THE EMPLOYMENT OF RURAL FARM WIVES

James A. Sweet
Center for Demography and Ecology
and
Institute for Research on Poverty
University of Wisconsin
Madison, Wisconsin 53706

August 1971

Paper presented at 1971 Annual Meetings of Rural Sociological Society, Denver.

RC005492

ACKNOWLEDGEMENTS

The research reported here was supported by funds granted to the Institute for Research on Poverty at the University of Wisconsin by the Office of Economic Opportunity persuant to the provisions of the Economic Opportunity Act of 1964. The conclusions are the sole responsibility of the author. Certain data used in this analysis were derived by the author from a computer tape file furnished under the joint project sponsored by the U.S. Bureau of the Census and the Population Council and containing selected 1960 Census information for a 0.1 percent sample of the population of the United States. Neither the Census Bureau nor the Population Council assumes any responsibility for the validity of any of the figures or interpretations of the figures presented herein or based on this material.

The Employment of Rural Farm Wives

In recent years more than a third of all married women in the United States were in the labor force at any given month, and nearly half worked at some time during the year. The employment of married women has received considerable attention of social scientists with a variety of interests, and from a variety of perspectives. Maternal employment has been thought to be related to social and psychological development of children, although few, if any, studies have identified any measurable effects (Nye and Hoffman, 1963). The division of labor in the family and marital happiness are believed to be related to the employment of wife (Blood and Wolfe, 1960, Ch. 3; Orden and Bradburn, 1969). Family economic welfare, consumption patterns, and life style are affected by the wife's employment ane earnings (Morgan, et al., 1962; 1966), and some have argued that the overall family income distribution is made more equal as more wives are employed (Thompson, 1965, p. 3; 1968; Miller, 1966, p. 22). Labor force participation of wives has been regarded as an indicator of "modernism" or "nontraditionalism," or as one of a variety of "nonfamilial" activities, in which modern, "nontraditional" women are increasingly engaging (Ridley, 1959). Students of demographic behavior have suggested that the work role and the maternal role interfere with one another, and that an adequate theory of fertility would have to take into account labor force behavior and attitudes toward employment (Westoff, et al., 1961; Sweet, 1970; Easterlin, 1968; 1969). Economists have focused on the labor force participation of wives as a labor supply phenomenon, which can most fruitfully be conceptualized in

terms of choices among leisure, "home work," and market work under varying conditions of "tastes," family economic pressures, and earning capacities (Cain, 1966; Bowen and Finegan, 1969; Mincer, 1962; 1966). Virtually all students of labor force participation have speculated on the change in industrial society over the past half century or so that have led to larger and larger proportions of women seeking employment outside the home (Oppenheimer, 1970; Long, 1958; Bancroft, 1958; Cain, 1966).

At the time of the 1960 Census, 22.5 percent of all rural farm wives were employed -- 70 percent of them in nonfarm occupations. In spite of significance attributed to the general issue of working wives, and the rather large proportion of farm wives in the work force, very little research has been devoted to the determinants or consequences of employment of wives in the farm sector of the population. Two recent studies omit farm women from their samples without even a word of justification (Cain, 1966; Bowen and Finegan, 1969). Most other national sample studies have contained too few farm respondents for separate analysis.

Studies of employment differentials among urban wives have shown that there are a number of individual characteristics of women which influence the probability that they will be employed. Specifically, (1) the greater the family economic need, the greater the probability of employment. Bowen and Finegan (1969, Ch. 5) show, for example, that, net of other characteristics, wives in families with incomes of $2000-2999 (excluding wife's income, if any) the employment rate of wives is 21.1 percentage points higher than it is in families with incomes of $9000-10,999.

The relationship of employment status to family income (excluding wife's earnings) is monotonically declining, and approximately linear.

(2) The greater a woman's education, the higher her probability of employment. Women with a college degree are nine percentage points more likely to be employed than women with twelve years of education and nearly 17 percentage points more likely than women with only eight years of schooling (Bowen and Finegan, 1969, p. 116). Again the relationship is monotonic and nearly linear when the effects of other confounding variables have been controlled. The usual interpretation of this relationship is that women with greater amounts of education are more likely to be able to obtain work if they want it; more likely to earn enough if they work to motivate them to seek work; and more likely to be motivated to seek work by virtue of their socialization into work roles and by virtue of the greater access to clean, light, and generally interesting employment opportunities.

(3) Married women with children are more likely to work the older their youngest child, and the fewer the number of children (see Sweet, 1970).

(4) Negro wives are at least seven percentage points more likely to be employed than white wives (Bowen and Finegan, 1969, p. 90; Sweet, 1968).

(5) Labor force participation varies with age, with peaks at around ages 20-24 and 45-54, with a trough in between. Net of the differential family status composition, age does not seem to exert a significant effect on employment, except that very young wives (under

age 20) have markedly lower employment rates than wives in their 20's and 30's and the employment rates of wives over the age of 40 or 45 decline with age (Sweet, 1970).

Other studies of the employment of urban wives have found that employment rates are higher in those areas with an industrial structure with heavy concentration of "female" jobs such as clerical occupations, light factory work, and service occupations. Employment rates are also higher in areas in which female earnings (median earnings of full-year female workers) are relatively high (Bowen and Finegan, 1969, Ch. 6; Cain, 1966).

In contrast to urban women, farm women would tend to be living in areas where employment opportunities, other than those on the farm, are more sparse. In comparison to urban women, farm women tend to have higher fertility and thus would be more constrained from working by familial responsibilities. They tend to have lower levels of education and might be expected, whatever their education, to be more traditional in their view of the appropriate role of women. But they are also more likely to be living under conditions of great family economic need.

In this paper we shall compare the employment rates of married farm women with those of nonfarm women; compare the employment rates of rural farm women in different kinds of geographic areas; and, finally, examine with multivariate analysis the effect of a variety of individual characteristics on the employment probability of rural farm wives. An important feature of this latter phase of the analysis will be the inclusion of a more refined measure of the occupation of the husband,

including a detailed division of the "farmer" category by sources of income and whether owner, renter, or no cash rent as a predictor of the employment of married women.

Data

The data for this paper are taken from the 1960 Census of Population and Housing. Some published data are utilized, but most of the analysis is based on the 0.1 percent sample tape. Records for all rural-farm married, spouse present persons were extracted from the 1/1000 sample. For this analysis records for husbands and wives were read and processed as a single record in order to permit the analysis of variation in wife's employment by detailed occupation of the husband. The analysis was limited to married, husband present women under the age of sixty. There are a total of 2613 cases in the sample, of whom 597, or 22.5 percent, were employed during the census week.

There are several features of these census data that are worthy of comment before proceeding with the analysis.

A. We know nothing directly from the census about the type of farming operation, if any, in which the family in question is engaged. We do, however, have several clues:

1. Occupation of the husband. In most cases the woman's husband would be the head of the household. The "occupation of husband" question refers to the current occupation during the census week (generally during April or May), if the husband was not in the labor force or was unemployed

during the census week, we have classified him accordingly in separate categories. In cases where a person had more than one job during the census week he is classified in the occupation in which he spent the most time during the census week. The part-time farmer, then, would not be directly identifiable as a farmer unless he spent the majority of his work week in farming.

2. Tenure. We can distinguish among families who live in rented housing, in owned housing, or in nonowned housing where there is no cash rent. We make the assumption that a family who owns its home, where the husband is classified as farmer in the occupational classification, owns its own farm or at least part of it. Similarly for renters: Those who rent their house also rent their land. The "no cash rent" category includes at least three groups of persons: sharecroppers, migrant workers who do not directly pay rent for housing, and undoubtedly a few other persons who farm a farm which is owned by some relative and who pay no rent. We cannot, with available census data, distinguish among those groups, except that the sharecropper should be classified as "farmer," and the migrant workers as "farm laborer."

3. Source of husband's income. Among "farmers" we can distinguish among those who have only self-employment income, those who have both wage and salary and self-employment income, and two ambiguous cases of persons with neither income source and those with wage and salary income only. Income derived from one's own farm operation, whether owned or not, is regarded as self-employment income.

Farmers with only self-employment income would generally be full-time farmers with no other employment throughout the year, although a farmer who is a self-employed carpenter, plumber, or whatever, or who sells seed or something other than the products of his farm, would be included in the self-employed only category. The farmers with both self-employment and wage and salary income include the farmers who obtain urban employment in the off-season, or who have a secondary wage and salary job, in addition to the primary farm activity.

We cannot identify part-time farmers whose primary activity during the census week was something other than farming. The 1960 census does not list farm income as a separate component; the 1970 census will.

B. One major deficiency with the 1960 1/1000 census sample is the lack of data on location of the rural-farm population. The best we can do is to classify the population into the four census regions -- Northeast, North Central, South, and West -- and into metropolitan and nonmetropolitan residence. Those with a metropolitan residence can be further subdivided by size of metropolitan area. It would be desirable to be able to divide the nonmetropolitan, farm population further in terms of distance from metropolitan centers, the economic base of the county, the type of nonfarm activity in the area, etc.

C. In a previous paper I restricted my analysis to the nonfarm population on the grounds that considerable unreliability in reporting employment status of women enumerated in agriculture was found in census evaluation studies. However, upon further reflection, most employed farm women are employed in nonagricultural jobs with reference to which

the employment status concepts are not so ambiguous.

Both for reasons of reliability and for substantive reasons to be discussed later, I shall, in my analysis of the 1/1000 sample data, show separate regressions in which total employment and nonfarm employment are the dependent variables. It is not possible to make this distinction when making use of published decennial census material.

D. Our sample is defined with respect to the type of place of residence, rather than with respect to the type of occupation of husband. Let us review briefly census practice with respect to the designation of farm residence. In the 1960 census the farm population is determined by two alternative criteria: A resident of "rural territory" on a "place" of less than ten acres, from which sales of crops, livestock, and other farm products exceeded $250 is regarded as rural farm. On "places" of ten acres or more, sales of at least $50 is required. A person need not be operating his farm as his major employment activity in order to be designated as a "farm" resident. A substantial number of persons may live in rural nonfarm territory and work as a wage laborer on a farm. We do not include such persons. Ours is a residence criterion, not an occupational criterion.

E. Both farm and nonfarm employment opportunities for women in rural areas are likely to be disproportionately seasonal. Nonfarm employment may be available in the period of the year when crops are being harvested and need to be processed and shipped to the market. Women may work in canning facilities, they may sort and grade produce of various kinds, or otherwise participate in the processing and marketing

of agricultural output. This seasonality might be especially pronounced for women with relatively low levels of education and training and for women living outside of metropolitan areas. Perhaps seasonality of nonfarm employment may be less pronounced in areas with warmer climates where the growing season is longer (possibly in the West or South) and in areas growing crops which are readily stored and not quickly persihable. One might expect, for example, that the processing of the cotton crop is less a seasonal activity than the processing of tomatoes.

The 1960 census was conducted primarily during April and May. Clearly then there would be very few seasonal workers engaged in harvesting operations or processing operations at that time. Of course, seasonal work is not found only in rural areas. Many seasonal opportunities in retail trade, for example, are available in urban areas at Christmas time, and at other peak seasons in other industries. It seems likely, however, that these opportunities are relatively less numerous than those in rural areas, and that they would be opportunities not for the woman with little education but disproportionately for those with at least a high school education. To get some idea of the extent of seasonality we have computed the ratio of women employed at some time during 1959 to those employed at the census date for both rural farm and urban wives (Table 1).

Part-year employment seems to be much more common among rural farm women than among urban women, at all ages, education levels, and for nonwhites as well as whites. In farm areas the ratio of persons working in 1959 to persons employed at the time of the census are higher

at lower educational levels. This is not true among urban women. We cannot tell from these published data whether this is true both for nonfarm jobs as well as for farm jobs.

To get some idea of differentials in seasonality of employment, we will present two additional sets of regressions in which the dependent variables refer to whether or not the wife worked at all in 1959. The first set refers to any employment at all, while the second set refers to employment in nonfarm occupations. Women are classified occupationally in terms of their current occupation if they were working during the census week or their last occupation if they worked in 1959, and were not at work at the time of the census.

Historical Perspective: Recent Trends in the Employment of Rural Farm Wives

The proportion of rural farm wives in the work force has increased markedly since 1940,* the first date for which we have data. The overall e loyment rate was 11.1 percent in 1940, 15.5 percent in 1950, and 21.8 percent in 1960. Because of the difficulty of accurately classifying the employment status of women in farm jobs, we prefer the time series of nonfarm employment to that of overall employment. The nonfarm employment figures for the three decennial census dates were

*The change in definition of the "farm population" introduced in 1960 resulted in some shift from rural nonfarm into rural farm category. This may have slightly increased the rate of employment of farm wives, since rates tend to be higher for rural nonfarm women than rural farm women. It is not possible to estimate the matnitude of the effect of this changed definition.

6.7, 9.2, and 16.4 (Table 1, bottom row). These compare with employment rates of 22.4, 27.6, and 32.6 for all American women in the three census years.

We show also in Table 2 the occupational distributions of the employed farm women for the three census dates. The most notable shifts are the shift toward clerical and sales employment (8, 14, and 21 percent); the shift out of domestic service (20, 7, and 9 percent); the shift into "other service" (5, 6, and 10 percent); and the shift into operative occupations (9, 13, and 15 percent). The measured shift away from farm occupations (40, 41, and 25 percent) occurred entirely during the second decade.

Apparently rural farm wives have continued to enter the labor force in greater and greater proportions during the 1960's.* The annual CPS figures on employment, percent of employed in farm jobs, and employment in nonfarm jobs are displayed in Table 3. By 1969 the nonfarm employment rate had increased to about 24 percent. The rise has been more or less continuous throughout the decade.

---

*The CPS and census figures for 1960 are somewhat different from one another. The CPS finds more employed women, but only a few more employed in nonagricultural occupations. Compare bottom panel in Table 3 with 1960 figures in Table 2. The CPS almost always classifies a greater number of persons in the categories that are ambiguous such as "unpaid family worker in agriculture," because the enumerators are better trained and know what the various concepts mean and how they should be applied. The 1960 question on employment status was gathered in rural areas largely by enumerators (in single stage areas) who were not well-trained or experienced, or by self-enumeration. It is rather encouraging to find that the CPS and census nonfarm employment rates are so similar.

Rural-Urban Differences in Employment

We will begin our analysis with a brief set of gross rural-urban comparisons of a number of aspects of female employment such as unemployment, weeks worked per year, occupational distributions, and earnings. We will then turn to differentials in employment within the rural farm population.

In order to talk as closely as possible about differentials in nonfarm employment we take, whenever possible, the proportion with income in 1959 was our measure of employment -- thus eliminating the unreliable category of women who were unpaid family workers and received no earnings at all in 1959. This also helps to get around the problem of seasonality introduced by virtue of the fact that our data refer to April or May, which may be a slack season for women in seasonal nonfarm jobs.

Age Patterns of Employment

The age pattern of employment of farm women is similar to that of urban women except that there is somewhat less of an increment in employment in the range 14-19 to 20-24 (Figure 1). This probably relfects earlier marriage and earlier childbearing by farm wives. Also there seems to be less of an increase in employment over the range 30-34 to 45-54 for farm wives. Thus there may be less "returning to work" after childbearing is complete and as children age and are in school.

An alternative explanation may lie in the fact that the nonfarm employment of farm women was rather rare until quite recently. The shape of the age pattern of employment of rural farm wives 35 years of age and older in 1969 is approximately the same as that exhibited by urban wives a decade earlier. One might speculate from this that as the younger rural farm cohorts (or what is left of them after migration) age, their employment pattern will increasingly resemble current urban cohorts. The rising rate of nonfarm employment by rural farm women may be occurring as a result of increasing employment rates of younger women who will continue to work in relatively larger proportions as they age, rather than as a result of increased employment of older cohorts whose employment when they were younger was rather rare.

Education Differentials in Employment

Overall rural farm women aged 25-59 have an employment rate that is 62 percent of the urban rate. If we standardize the rates on the urban education distribution, the rate differential is not affected appreciably (see last row of Table 4). Farm women with less than twelve years of schooling have rates that are 50-60 percent of the urban rate, while farm women with a college degree are as likely to be employed as their urban counterparts. We will return to educational differences in employment in a later section.

Unemployment, Part-Year, and Part-Time Work

Measured age-specific unemployment among rural farm women was not much different from that of urban women in 1960 (Table 5). Overall, rural farm unemployment is lower than urban, largely because the rural farm population is more heavily concentrated in the older ages where unemployment is low, both in urban and in rural areas. The unemployment concept as used by the Census Bureau is often very ambiguous when applied to secondary workers under conditions of labor surplus. The definition is behavioral, implying a search for employment. Women who have given up the search or who have never begun it simply because they do not believe it would be fruitful would generally be excluded from the measured unemployed. Unemployment differences must be understood in this behavioral way, rather than in implying the limits of some potential labor force. There is evidence to suggest that under many conditions the demand for female labor tends to create its own supply (see Oppenheimer, 1970; Bowen and Finegan, 1969, Ch. 6).

Among women with work experience, married farm women at any age are more likely to have worked fewer weeks per year than married urban women. For example, among married women 35-44, 44 percent of the urban and 37 percent of the rural worked a full year. Twenty-eight and 35 percent respectively worked less than 26 weeks (Table 5).

Similarly, at all ages, employed rural farm women are more likely than urban women to be working part time (Table 5).

Occupation

About three-fourths of all employed rural farm women were engaged in nonfarm jobs -- 35 percent in white collar and an equivalent number in blue collar jobs (see Table 2).

Earnings

The median earnings of rural farm women with earnings was $966. This contrasts with $2203 for women in central cities of urbanized areas and $1595 for women in urban places outside urbanized areas. The median annual income of farm women with less than a college education was only 40 to 50 percent of that of women in central cities, while the median income for farm women with 13-15 years of education is 75-90 percent of the central city figure. (Data shown in Table 6 for women 35-44; similar patterns exist for women at younger and older ages.) How much of these rural-urban differences in annual earnings are attributable to differences in weeks worked per year and hours worked per week is not known.

Percent with No Work Experience

At every age the proportion of rural farm women who report that they have never worked is considerably greater than that for all women in the U.S. More than a quarter of the farm wives aged 25-34 and nearly half of those 55-64 report never having worked. This contrasts with

about an eighth of the younger women and a quarter of the older women in the total U.S. population.

Employment Differentials Within the Rural-Farm Population -- Multivariate Analysis

How do employment rates of rural farm wives vary with respect to personal characteristics such as educational attainment or family status; with respect to characteristics of the area of residence (region and metropolitan or nonmetropolitan residence); and with respect to the type of occupation of the woman's husband? How do the relationships between employment and the various characteristics for rural farm wives compare with those for urban wives? We turn our attention to a multivariate analysis in an attempt to answer these questions.

The method of analysis to be employed is a dummy variable regression procedure known as multiple classification analysis (see Andrews, et al., 1967; Sweet, 1970). The results are reported as category-specific deviations from the overall sample employment rate. All deviations are expressed as percents. For example, the first panel of Table 7 shows that wives residing in the South have a crude rate of employment that is 1.9 percentage points above the grand mean of 22.5 percent, or 24.4 percent. Net of the correlation of region with other variables included in the analysis, the effect of living in the South is to raise employment by 2.4 points above the grand mean. The increment from 1.9 to 2.4 points implies that the South has a composition with

respect to age, education, and all the other included variables that is relatively unfavorable to employment. When we control on that composition, the employment difference between the South and the U.S. as a whole is increased.

We report results for two sets of regressions -- the one predicting overall employment and the other predicting nonfarm employment. The respective grand means are 22.5 and 15.9 percent. Our discussion will focus on nonfarm employment for two reasons -- because, as we mentioned earlier, there are problems in reliably classifying rural farm wives who are in farm occupations, and because our interest is in employment for pay outside the home. Many farm wives in farm employment are unpaid family workers working at home. One might speculate that the processes underlying differentials in such unpaid family work (is we could reliably measure it) differ substantially from those underlying work for pay. We will refer from time to time to the results of total employment regression when they serve to illuminate our interpretation of the differential patterns of employment.

In making comparisons between urban and rural farm relationships we will use the urban results reported by Bowen and Finegan (1969). The regressions reported by them include all of the variables included in our analysis except for region, metropolitan residence, and husband's occupation. The family status variable that we use is somewhat different from theirs. Other variables are defined and categorized in a similar way. We have run rural farm regressions that more nearly replicate their urban procedures. The results for the comparable variables do not differ substantially from those reported here when we include a larger set of independent variables.

Region

Southern wives are more likely to be employed, and considerably more likely to be employed in nonfarm jobs, than are wives from the other regions.

When additional, potentially confounding variables are included in the analysis, farm wives in the South are 4 percentage points more likely than the average, while those in the Northeast and North Central and West are 2 or 3 percentage points less likely to be working in nonfarm jobs. Thus it does not appear that the farm women in the South exhibit "more traditional" employment behavior than do farm women in the rest of the country. Quite the contrary, net of compositional differences, wives in the South are considerably more likely to be working.

Since the differential is present (and even greater) for nonfarm employment, the explanation for this regional difference cannot be found in the type of agricultural activity engaged in the South. It cannot be due, for example, to the greater labor intensiveness of Southern agriculture (if indeed Southern agriculture is more labor intensive). Nor can it be due to the timing of the census (April-May) and regional differences in peak use of agricultural labor.

One might speculate that employment opportunities in manufacturing and commerce might be more diffuse in rural areas in the South than in the rest of the country, and that Southern rural farm women have greater physical access to such jobs. Also, Southern industry may tend to have a relatively greater concentration of female jobs than industry in other

areas. For example, industries such as tobacco manufacturing, textile production and apparel manufacturing, food processing, and other light manufacturing tend to be disproportionately employers of women.

We get a clue as to the source of the higher rate of employment of rural farm women in the South by an examination of the occupational and industrial distributions of rural farm women in the South and the rest of the United States (Table 8). The distribution for the South shows a surplus of women in manufacturing industries (21 percent versus 14 percent), particularly in the textile and apparel industries (textiles: 4.3 percent versus 0.5 percent; apparel: 10.4 percent versus 2.3 percent). The South also has a surplus of workers in "personal service" industries (14.7 percent versus 9.3 percent). Other than in agriculture, there is no one industry in which the South has a major deficit; the deficit is spread rather evenly throughout the rest of the distribution.

Occupationally, the South has a relative surplus of operatives (19.9 percent versus 11.4 percent) concentrated in nondurable goods manufacturing (15.6 percent versus 5.5 percent) and of private household service workers (11.4 percent versus 6.7 percent). The Southern deficit lies mainly in clerical work (12.3 percent versus 17.8 percent).

Evidently Southern rural farm women have much greater access to factory jobs in textiles, apparel and other nondurable goods manufacturing. They also have more opportunities for private household work. They are at a disadvantage with respect to clerical occupations.

Metropolitan Residence

Farm wives living in metropolitan areas have a total employment rate and a nonfarm employment rate that are nearly 4 percentage points higher than those of wives living outside metropolitan areas. When we adjust for compositional differences, the differentials are increased very slightly. Published data (see Table 1) show that the occupational distribution of rural farm women (irrespective of marital status) with metropolitan and nonmetropolitan residences are rather similar. The only differences worthy of note are the larger share of nonmetropolitan women in the farm occupations (22.9 percent versus 20.0 percent) and in operative occupations (15.5 percent versus 12.4 percent), and the smaller share in clerical occupations (14.3 percent versus 22.1 percent).

Education

Employment rates tend to increase with education for rural farm wives, just as they do for urban wives. Women with less than five years of education have very low rates (22.6 - 12.6 = 10.0 percent), while nearly a quarter (22.6 - 1.1 = 21.5 percent) of farm women with high school education are employed. The rate of nonfarm employment shows an even sharper relationship with education. Only 5 percent of the lowest education group and about 20 percent of the high school graduates are employed in nonfarm jobs. The urban-farm differential is greater, the lower the level of education. For all education levels up to 13-15 years, farm wives have employment rates that are 10 to 20 points below those of urban wives. College-educated (16 or more years of schooling)

farm wives have employment rates that are considerably higher than college-educated urban women.

Why should employment rates be as high for rural farm as for urban college-educated women -- and so much lower for less well-educated women?

(1) There are relatively fewer college-educated rural women than urban women. Thus, relatively fewer women are competing for the employment opportunities.

(2) The employment opportunities available to the poorly-educated women which are found disproportionately in urban areas - other service jobs including cleaning offices, etc., retail sales, and factory workers -- are rare in rural farm territory. On the other hand, schools must be staffed, providing employment for college-educated women.

Employment opportunities of all kinds are relatively rarer in rural than in urban areas. By comparing the nonfarm occupational distributions of female rural farm and urban residents, we can get a good idea of where in the occupational structure opportunities are disproportionately under- or over-represented among rural farm residents. A higher proportion of employed farm residents are found in private household service, operative, and professional occupations. A considerably lower proportion of rural farm residents are found in clerical occupations. The remaining major occupations are represented approximately equally in the urban and rural farm occupational distributions.

The relative deficit of clerical jobs should depress the employment of high school graduates and, perhaps to a lesser degree, of women

with 13-15 years of schooling, or it may tend to force such women into accepting manual employment. To the extent that the latter occurs, women with less than 12 years of schooling may be precluded from participating in the work force because of the better competitive position of the better-educated women. No published data on occupation by education exist for rural farm women. The 1/1000 sample contained too few cases to reach any conclusions about the differential allocation of persons into occupations. The relative surplus of private household and operative employment, combined with approximate equality in retail sales and other service would tend, ceteris paribus, to raise the employment of women with low levels of education. The overall shortage of female jobs in rural areas may tend, however, to place women with few occupational skills and low levels of education in a particularly bad employment situation. Their position is worsened even further by their relative abundance in the population. Nearly 40 percent of the rural farm wives have less than nine years of schooling. The opportunities for employment in school teaching combined with the relative scarcity of women with college degrees tends to raise the employment level of college-educated women.

Family Income Minus Wife's Earnings

There is remarkably little variation in employment by our index of family economic pressure for incomes of less than $7500. Wives in families with incomes (net of the wife's income) of $7500-9999 have non-farm employment rates that are one point below the mean, while the

employment rate increases with net family income of $10,000 or more (only 6 percent of the sample) is 8 percentage points below the mean. When we control for education, occupation of husband, and several other characteristics, the relationship remains about the same. The linear partial regression coefficient of employment on family income minus wife's earnings is -.008. For each additional $1000 of the income variable, the employment rate is reduced by .8 of one percentage point. Cain reports that the similar figure for the urban population is about 1.9 percentage points. The relationship is approximately linear for the urban population, but for the rural farm population it is discontinuous. There is almost no difference in the employment probability for incomes under $7500.

Why should there be virtually no relationship between family income minus wife's earnings and wife's employment? There are two kinds of explanations -- that the measured variable is not an adequate indicator of family economic need or that there are other factors, correlated with low income and not included in our analysis, that interfere with the response of the employment of wives to family economic need.

The difficulty of measuring real farm income is well known. There is the major problem of income-in-kind which is not included in measured income. Many farm families grow and process much of their own food; farm tenants may pay no cash rent; and many farm families may provide a number of services, such as automobile repair, for themselves rather than in the market. If farm real income is systematically understated at low levels, our relationship may be distorted.

This probably does not account for the whole relationship. (1) Farm income may be lower, independent of other factors, the more remote the location. Jobs for women may be scarcer in remote locations. (2) Poor farm families may not have access to motor vehicles to transport wives to work. In the absence of public transportation this might lower wives' responses to employment opportunities. (3) Under conditions of labor surplus, wives of low-income men, even net of education, may be less desirable than wives of higher-income men for potential jobs. (4) The employment of wives of men earning substantial incomes may not be downwardly responsive to husband's income, if there is much inter-annual variation in income. Thus, farm wives of men making adequate current incomes may stay in the work force as insurance against unpredictable declines in husband's income. (5) Low income may be an indicator, independent of age, education, and husband's income, of a kind of traditional view that the wife's place is in the home. (6) Low husband's income may be strongly correlated, ceteris paribus, with the wife's lack of work experience and of marketable skills.

Race

Negroes are 3 percentage points more likely to be employed than are white wives; but their greater employment is due to a greater farm employment. Their nonfarm employment rate is nearly a point below that of white farm wives. When we "control" in this additive sense for other characteristics, we find that Negro employment rates are, rather, higher than those of white women -- eight points higher overall and three points

higher in nonfarm occupations. Negroes are concentrated in those categories of the other variables which are not conducive to employment -- nonmetropolitan residence, low education, and husbands who are in farm occupations.

Our small sample (37 cases) of Spanish surname persons (in five Southwestern states) has an overall employment rate that is 14 points lower, and a nonfarm rate that is eight points lower than the white rate. When we adjust for other characteristics, the overall difference is reduced to six points and the nonfarm difference is eliminated. We would emphasize that the sample size is small and thus the Spanish surname results may not be reliable.

How are we to interpret this pattern of race differences? Black rural farm women are no more likely to work in nonfarm jobs, net of individual and residential characteristics, than their white counterparts, whereas in urban areas black women have employment rates considerably above the white rate. How do black farm women compete with white farm women? One would guess that population concentration of blacks in rural areas and smaller towns would not be sufficient to warrant the establishment of many separate black institutions to service black populations. Black employment is probably relatively rare in establishments with central place functions, except for the menial service occupations. Very little is known about the character of manufacturing activity in rural areas. Are significant numbers of black women employed in such establishments? Is the work seasonal? Would the employment rates of black wives be significantly higher if the census had been conducted in

the summer, when the food processing industry was more active, rather than in April? Are jobs in rural areas with a biracial population as race-sex typed as they are in urban society, or more so? In urban areas, Negro women are heavily concentrated in domestic service occupations. Are there opportunities of this sort in rural areas and the small towns near the farm areas inhabited by blacks?

We tend to think that demand tends to create its only supply of female workers. Urban Negro women are relatively poorly educated compared to urban white women. The competition of white women with black women for low-skilled jobs in urban areas may not be very severe. In rural areas, the proportion of white women who have low levels of education and limited marketable skills is rather high. There may be greater competition for unskilled jobs. On the other hand, there may be relatively greater opportunities for women with high school education or more.

Finally, with respect to race differences, there may be greater or lesser urbanward migration of black women versus white women with training and a propensity for employment. How differentials in the selectivity of migration between blacks and whites might affect the relative labor market position and employment is not known.

Age

The age pattern of employment of farm wives, net of family compositional effects, is rather similar to the urban pattern. Wives under the age of 20 are less likely to work than wives 20-24; there is little variation between 20 and 39 and a progressive decline beyond age 40.

Family Status

The employment rates of women with no own children under 18* is approximately the same as that of women with youngest children aged 12-17. Among women with children, the older the youngest child the higher the employment rate. A more adequate assessment of the effect of the family status variables can be made by considering the simultaneous effects of age of youngest child and number of own children on the employment rates of women with children only. The results of such regressions are reported in Table 9 for both rural farm and urban mothers.

The patterns of increasing labor force participation with increasing age of youngest child is present for rural farm wives just as it is for urban wives. The magnitude of difference between the upper and lower categories is rather greater for urban than rural wives -- 37 points for the urban and 18 points for nonfarm employment of rural farm wives. Thus the adjusted employment rate for mothers of children 0-2 would be 5.7 percent for rural farm mothers and 10.7 percent for urban mothers. Expressed in relative terms, the adjusted urban rate is approximately twice the adjusted rural farm nonfarm employment rates at all ages of youngest child.

The number of children in the family has no systematic effect on either total or nonfarm employment. For urban wives there is a three

---

*The reader should note that this group is comprised not only of women who remain childless throughout their lives, but also those who have recently married and not yet borne children and those whose children have all grown up and left home. It is a heterogeneous group, the "essence" of which (i.e., after controls on age) is ambiguous.

point differential between mothers of one child and those with two children, while there is almost no variation by number of children among the employment rates of women with more than two children.

Husband's Occupation

Wives of farm residents who are employed in nonfarm occupation have overall employment and nonfarm employment rates that are considerably above the mean. Nonfarm employment rates of wives of white-collar workers are 6-10 points above the mean, as are those of wives of men in all the blue-collar occupations except laborers. Wives of farmers with only self-employment income are more than four points less likely than average to be working in nonfarm jobs, while wives of farm laborers, and wives of farmers with both self-employment and wage and salary income are slightly above the mean.

When the education, location, and other variables are controlled, the rate for wives of white-collar workers is reduced. Their high crude rate of employment can be attributed to their higher education. Wives of blue-collar workers (except laborers) have the highest rates of employment. Among wives of men with farm occupations, wives of farm laborers have an employment rate which is 3.7 points above the grand mean for nonfarm employment; wives of farmers with self-employment income are only 1.8 points less likely than average to be working; while those wives of farmers with self-employment and wage and salary income are 2.6 points above the mean employment level. Nonfarm employment opportunities for women seem to be concentrated in areas where there are nonfarm opportunities for their husbands as evidenced by nonfarm primary jobs or part-time or part-year nonfarm employment.

Tenure

Our inclusion of tenure in the analysis is an attempt to get at added dimensions of the type of farm operation. Our assumption is that farmers who own their housing also own some or all of the land they farm. Similarly, we assume that the "no cash rent" population consists by and large of persons who are involved in a sharecropping relationship, and those who pay rent are by and large in a cash rental relationship with someone for the land that they farm.

The variable seems to have something to do with the control exerted by the farmer over the mode and tools of production and something to do with the stability of the relationship of the farm operator to his land. Finally, there might be some relationship between the tenure variable and modernity or the acceptance of change in some sense, with the farm owner being the most "modern" and the share tenant being the least modern. We would not press these arguments further than to say that our main effort is to get at differentiation in the employment of rural farm wives. If employment varies by tenure, after husband's occupation and other characteristics are controlled, then tenure must be of some significance and worthy of further investigation with more adequate data.

Table 10 reports the effect of tenure on employment. Our procedure was to divide the "farmer" category initially into the "self-employment only" and "wage and salary plus self-employment income" categories and, within those categories, to look at the effect of tenure on employment. The regressions reported are computed over the total

sample of rural farm wives, and the effects are net of all those variables shown in Table 7. The number of renters is rather small in both groups of farmers and there are only 52 farmers in the "no cash rent" category with both sources of income. Among wives of farmers with only self-employment income, there is virtually no difference in the employment rates for those who own and those in the "no cash rent" category. Among those with both income sources, however, the owners have an employment rate that is nine points above that of the "no cash rent" category. Among those with both income sources, however, the owners have an employment rate that is nine points above that of the "no cash rent" group.

Whether or not this is a reliable estimate of the true difference is not known, since there are only 52 cases of one group being compared. One might be tempted to explain the difference in nonfarm employment in terms of modernity or access to nonfarm employment opportunities. The question then arises, why for the "wage and salary and self-employed" group, but not for the "self-employed only" group? On this point we have neither evidence nor promising hypotheses. We would conclude the discussion of tenure with the very weak assertion that perhaps tenure is a worthwhile dimension on which to differentiate the farm population. We lack empirical evidence on the "significance" of tenure as a social variable, and our attempt to find large differentials in wife's employment by tenure has been only partially successful.

Worked in 1959

Table 11 presents analogous sets of regressions to those in Table 7, except that the dependent variable in this case is whether or not the woman worked at all during 1959. In the first set we consider total employment, while in the second set we consider only nonfarm employment -- i.e., women whose current or most recent job was in a nonfarm occupation. The question in which we are interested here is whether, if we consider seasonal work as well as current work, we would find changed relationships. We focus on nonfarm employment.

Region

The higher current employment rate enjoyed by the South is diminished substantially. The overall differences among the regions are reduced considerably. Evidently nonfarm opportunities in the South are less seasonal than in other regions and/or the seasonal activities are more common in the spring of the year. Clearly the processing of cotton (i.e., the textile industry) is less inherently seasonal than the processing of tomatoes or most other food crops.

Metropolitan Residence

The higher current employment rates of farm women living in metropolitan areas are also in large measure due to less seasonal employment opportunities. The metropolitan-nonmetropolitan differential is reduced from over three points to slightly over one point when the variable being predicted is nonfarm employment in 1959.

Age

Net of family status and all other variables in the system, we find that young farm women, particularly those under 25, are disproportionately found in seasonal nonfarm activities. Beyond age 40 the drop in the proportion working in 1959 is much more rapid than is the drop in the proportion currently employed.

Race

Black women had a current nonfarm employment rate that was about 2.5 points greater than the white rate. The nonfarm, worked in 1959 rate for black women is more than five points above the white rate. Blacks, net of all other measured characteristics, are disproportionately in seasonal employment.

Education

Contrary to expectation, the educational differences are not attenuated when "worked in 1959" is substituted for "current employment." Differentials, if anything, increase slightly. Evidently in a labor surplus environment poorly-educated women cannot compete with better-educated women, even for the rather menial tasks associated with processing agricultural output.

Family Economic Pressure

No differences are observed in the results of these regressions and those reported earlier.

Family Status

The relationship of family status to work experience is about the same as that between current employment and family status. The differentiation is slightly greater for the work experience variable, implying that seasonal workers are drawn somewhat disproportionately from among women with no children or with older children.

Occupation of Husband

The basic patterns of employment differentials by husband's occupation persist when the dependent variable is nonfarm employment in 1959. Wives of professionals and both major classes of farmer tend to have higher coefficients on the work experience than on the current employment variable.

Discussion

Like their urban counterparts, rural farm women are employed in large and growing proportions. We were able to show that variation in rural farm employment rates were, in general, quite similar to the variation among urban women. Regional and metropolitan-nonmetropolitan differences in employment were documented and an explanation in terms of access to employment opportunities and differential seasonality of emp19yment was suggested. Finally, we described variation in the employment of wives in relation to the occupation of their husbands, with women married to men with nonfarm jobs having higher rates than those in

farm jobs. Variation in the employment of wives of men in different kinds of farming activities was also found.

Rather than summarizing our results in any greater detail, we will, in conclusion, enumerate a number of issues that derive from our analysis.

(1) Region and metropolitan residence each seem to have some effect on employment probability. We have tended, with only limited empirical support, to interpret these effects in terms of access to employment opportunities. Further research should examine differential employment rates and patterns among different rural areas in relation both to supply and demand factors. For example, what sorts of rural areas have higher levels of nonfarm employment opportunities? How responsive is labor supply to the increase in employment opportunities? How responsive is labor supply to the increase in employment opportunities? Do industries located in rural areas have any difficulty recruiting a capable labor force?

(2) Is there any connection between the fewer employment opportunities and lower earnings of rural farm women and their persisting high levels of fertility? Is fertility lower in rural areas where employment opportunities are relatively abundant and/or where wage rates are relatively high?

(3) As we have documented earlier in this paper, the rate of employment has increased markedly during the decade since 1960. How has this occurred? Have employment opportunities for women diffused into the countryside or has it been due to an increase in the employment

of women who live in the rural areas surrounding larger cities -- achieved by the commutation of women from their rural residences to employment opportunities concentrated where they have always been located?

(4) Do significant numbers of relatively well-educated women leave the countryside for the city because of the scarcity of professional and clerical employment opportunities? What effect does the unfavorable employment situation have on the sex ratio in "remote" rural areas?

(5) Do increases in demand for labor in rural areas have the result of rapid responses in supply? How does the allocation of persons to jobs differ in a "buyer's market" as against the situation in urban areas? Do employed women tend to have jobs that are less than commensurate with their education? Is there really a buyer's market in rural areas? Or are rural women more "traditional" with respect to activities that conflict with familial responsibilities?

Table 1

Ratio of Persons Working in 1959
to Those Employed During Census Week

	Total		Nonwhite	
	Rural Farm	Urban	Rural Farm	Urban
Education				
None	2.16	1.27	2.64	2.07
1-7 years	1.82	1.23	2.24	1.89
8	1.48	1.22	2.04	1.67
9-11	1.46	1.25	2.18	1.68
12	1.34	1.22	1.64	1.55
13-15	1.26	1.24	1.43	1.55
16+	1.14	1.14	1.03	1.57
Age				
20-24	1.58	1.40	2.27	1.87
25-34	1.50	1.30	2.22	1.71
35-54	1.38	1.15	1.95	1.61
55-64	1.46	1.16	2.07	1.74
65+	1.72	1.34	2.66	2.07
Total	1.64	1.22	2.08	1.69

SOURCE: 1960 Census of Population, Subject Reports, "Educational Attainment," PC(2), Table 5; "Employment Status and Work Experience," PC(2)6A, Table 20.

Table 2

Occupation Distribution of Employed Rural Farm Women,
1940, 1950, 1960, and by Metropolitan -- Nonmetropolitan Residence, 1960

	1940 Total	1950 Total	1960 Total	1960 In SMSA	1960 Not in SMSA
Professional, Technical, and Kindred	12.4*	10.0	12.0	12.0	12.0
Managers, Officials, and Proprietors	1.6	2.0	2.1	2.5	2.0
Clerical	8.4	10.1	15.4	22.1	14.3
Sales		4.4	5.6	5.9	5.5
Craftsmen and Foremen	0.3	0.7	0.8	0.9	0.8
Operatives	8.7	13.4	15.1	12.4	15.5
Private Household Workers	19.5***	7.3	8.7	8.8	8.7
Other Service	4.4	5.8	10.2	10.2	10.2
Laborers	4.9	0.7	0.5	0.5	0.5
Farmers and Farm Managers	13.8	8.6	9.5	8.1	9.8
Farm Laborers and Foremen	25.9	32.3	15.5	11.9	16.1
Not Reported	**	4.8	4.6	4.6	4.5
Total	100.0	100.0	100.0	100.0	100.0
% all women employed	11.1	15.5	21.8	25.0	21.3
% employed in farm occupations	39.7	40.9	25.0	20.0	25.9
% of all women who are employed in farm occupations	6.7	9.2	16.4	20.0	15.9

*Professional and Semi-professional

**Laborers includes not reported

***Domestic Service

SOURCE: 1940 Figures -- 1940 U.S. Census of Population, "Employment and Personal Characteristics," The Labor Force Sample Statistics, Table 26.
1950 Figures -- 1950 U.S. Census of Population, "Characteristics by Size of Place," Special Report PE-5A, Tables 5 and 5a.
1960 Figures -- 1960 U.S. Census of Population, "Size of Place," Special Report PC(3)-1B, Table 2.

Table 3

Recent Trend in Employment of Rural Farm Women

Married, Husband Present	Per cent Employed	Per cent of Employed in Nonagricultural Occupations	Per cent of All Women Employed in Nonfarm Occupations
1969	36.4	65.4	23.8
1968	35.8	65.9	23.6
1967	32.6	67.2	21.8
1966	32.1	62.7	19.9
1965	30.1	63.3	19.1
1964	28.4	62.5	17.8
1963	26.4	53.8	14.2
1961	29.7	55.3	16.4
1960	25.5	59.7	15.2
1959	25.5	60.2	15.4
1958	24.0 (Labor Force)		
1956	25.8 (Labor Force)		
1955	26.4 (Labor Force)		
1954	22.7 (Labor Force)		
All Women			
1961	28.1	57.3	16.1
1960	24.9	63.6	15.9
1959	25.0	64.0	16.0

NOTE: Enumeration conducted in March of each year, except for 1954 and 1955 in which figures refer to April.

SOURCE: U.S. Bureau of Labor Statistics, Special Labor Force Reports Nos. 2, Tables D & E; 13, Table D; 20, Tables D & E; 40, Tables D & E; 50, Tables D & E; 64, Tables C & D; 80, Tables C & D; 94, Tables C & D; 120, Tables C & D, U.S. Bureau of the Census, Current Population Reports, The Labor Force, Series P-50, Nos. 62, 73, and 87.

Table 4

Rural Farm-Urban Comparison of the Proportion of Women with Income in 1959, by Education (Women aged 25-59)

	URBAN		RURAL FARM		RURAL FARM / URBAN
	% Distrib.	% With Income	% Distrib.	% With Income	% With Income
< 8	11.7	52.4	19.7	33.5	.64
8	11.9	52.7	19.2	26.9	.51
9-11	22.5	53.2	18.4	33.1	.62
12	35.8	51.7	30.8	31.5	.61
13-15	10.6	56.4	8.5	43.0	.76
16 +	7.5	67.0	3.4	69.2	1.03
Total	100.0	54.0	100.0	33.6	.62
Education-Standardized on Urban Distribution		54.0		35.6	.66

SOURCE: 1960 Census of Population, Subject Report, "Educational Attainment," PC(2)5B, Tables 2 and 7.

Table 5

Rural-Urban Comparisons of Weeks Worked,
Hours Worked and Unemployment,
Married Husband Present Women U.S., 1960

Age and Residence	Of Those Working in 1959		Of Those Employed % Part-Time
	% Worked 50 - 52 Weeks	% Worked < 27 Weeks	Total
Urban			
< 25	27.7	44.2	19.7
25 - 34	34.4	38.4	27.9
35 - 44	43.6	28.3	29.1
45 - 54	49.0	22.0	27.2
Rural Nonfarm			
< 25	27.0	50.8	23.6
25 - 34	30.5	42.4	30.3
35 - 44	38.3	32.7	30.4
45 - 54	41.8	28.0	28.7
Rural Farm			
< 25	19.4	55.3	31.0
25 - 34	32.0	43.1	35.7
35 - 44	37.0	34.9	34.1
45 - 54	37.9	32.4	32.9

Unemployment Rates

Age	Urban	Rural Nonfarm	Rural Farm
14 - 17	17.1	15.5	15.2
18 - 19	10.6	10.1	12.4
20 - 24	7.2	8.1	6.8
25 - 29	6.1	6.9	5.0
30 - 34	5.6	6.0	4.0
35 - 44	4.7	5.2	3.8
45 - 54	4.0	4.3	3.6
55 - 64	3.9	4.2	3.1
Total, All Ages	5.0	5.5	3.9

SOURCE: 1960 U.S. Census of Population, Employment Status and Work Experience (PC(2) 6A), Tables 3, 12, and 18.

Table 6

Median Earnings in 1959 by Education for Women 35-44
with Earnings, Urban and Rural Farm Residents

Education	(1) Central City Urbanized Area	(2) Fringe Urbanized Area	(3) Other Urban	(4) Rural Farm	(5) Ratio RF:CC,UA (4) ÷ (1)
	Median Earnings, All Women 35-44				
None	$1389	$1049	$ 687	$ 564	.41
1-4 years	1400	1399	837	620	.44
5-7	1592	1745	1139	753	.47
8	1981	2036	1542	967	.49
9-11	2100	2100	1682	1127	.54
12	2774	2515	2150	1375	.50
13-15	3156	2641	2318	1905	.60
16	3718	2646	3091	3132	.84
17 +	4940	4796	4355	3929	.80
Total	$2371	$2325	$1832	$1088	.46

SOURCE: 1960 Census of Population, Subject Report, "Educational Attainment," PC(2)5B, Tables 2 and 7.

Table 7

Multiple Classification Analysis of the Employment of Rural Farm Wives

		Total Employment		Nonfarm Employment		Urban*	
	N	Gross Deviation	Net Deviation	Gross Deviation	Net Deviation	Gross	Net
Region							
Northeast	158	0.3	-2.0	0.5	-1.9		
North Central	1086	-2.1	-2.0	-2.9	-3.0	Not	
South	1107	1.9	2.4	2.8	3.6	Included	
West	262	0.4	-0.7	0.1	-1.7		
Residence							
Nonmetropolitan	2305	-0.4	-0.2	-0.4	-0.2		
Metropolitan	308	3.2	3.8	3.2	3.6	Not Included	
Age							
14-19	60	-4.1	-1.8	-5.9	-6.6	-4.6	- 7.1
20-24	173	-4.0	4.9	-0.9	4.2	-2.9	2.8
25-29	216	-2.1	4.2	-1.1	3.3	-6.9	3.7
30-34	330	-1.2	5.7	-1.7	4.4	-6.4	2.9
35-39	379	-1.1	2.3	-1.1	2.3	0.5	3.4
40-44	404	1.5	0.8	0.4	-0.1	5.9	1.4
45-49	416	6.4	1.2	4.9	1.7	7.8	- 3.5
50-54	343	-0.0	-7.4	1.9	-4.2	2.4[5]	-12.4[5]
55-59	292	-3.6	-9.2	-3.9	-8.9		
Race							
White, Spanish Surname	37	-14.4	-7.0	-7.8	-0.6		
White, Other	2364	0.0	-0.5	0.2	-0.2	-1.1	-0.6
Negro	193	2.9	7.9	-0.4	2.4	11.2	6.2
Other	19	-1.4	0.2	-5.4	-2.6	6.0	7.8
Education							
<5 years	132	-12.6	-14.7	-11.3	-14.9	-5.9	-16.6
5-8	888	- 2.8	- 4.0	- 4.6	- 6.0	0.0	- 7.1
9-11	485	- 1.6	- 2.3	0.6	- 0.4	-0.9	- 2.6
12	798	1.1	2.6	1.1	3.0	0.0	2.2
13-15	229	5.5	6.8	7.2	9.5	-0.1	5.2
16+	81	34.3	36.4	33.5	35.6	6.0	14.1
Family Income Minus Wife's Earnings							
< $1000	413	- 0.4	2.3	- 1.4	1.3	17.8	13.0
$1000-1999	386	- 2.0	-0.8	- 0.9	1.0	8.5	7.4
$2000-2999	392	0.5	2.3	- 0.6	1.4	9.9	10.7
$3000-3999	350	0.1	0.3	- 0.2	0.0	7.4	8.8
$4000-4999	278	3.4	1.4	2.1	- 0.1	6.6	8.0
$5000-7499	472	3.0	1.7	4.6	2.8	1.21	2.41
$7500-9999	163	- 1.6	- 3.7	- 1.2	- 3.9	- 5.7[2]	- 5.9[2]
$10,000+	159	- 8.6	-14.0	- 8.4	-13.6	-13.4[3]	-16.4[3]

Table 7 (continued)

	N	Total Employment Gross Deviation	Total Employment Net Deviation	Nonfarm Employment Gross Deviation	Nonfarm Employment Net Deviation	Urban* Gross	Urban* Net
Family Status							
No Children	837	4.1	8.2	4.4	8.0		
Children							
Youngest 0-2	546	-10.7	-15.2	-8.3	-14.1	Not Included in Comparable Form[4]	
3-5	311	- 4.8	- 4.7	-4.7	- 4.8		
6-11	502	2.0	- 2.7	0.6	- 2.6		
12-17	412	6.9	9.0	5.4	7.2		
Husband's Occ.							
Professional	36	11.6	1.9	9.6	- .4		
Other Wht. Collar	180	2.0	- .9	6.3	3.0		
Craftsmen, Foremen	184	6.5	6.0	7.6	6.8		
Operatives	224	2.6	3.5	7.4	8.0		
Service	32	5.7	5.0	9.1	8.4		
Nonfarm Laborer	85	- 3.6	- 1.6	-0.6	2.1		
Farmer							
Only Self-Employment Income	1056	- 1.5	1.8	-4.3	- 1.8		
W&S & SE Income	220	- 1.6	7.1	0.9	2.6		
No Earnings	133	0.8	- 3.1	-0.1	- 1.9		
W & S Only	12	- 5.8	- 7.6	-7.6	- 7.1		
Farm Laborer	204	- 1.7	- 1.1	0.1	3.7	Not	
Other Farm Occ.	18	- 4.8	- 5.5	-4.2	- 3.6	Included	
Unemployed or not in Labor Force	113	- 3.2	- 4.3	-0.5	0.1		
Not Reported	29	+ 5.1	4.2	-9.0	- 9.9		

SOURCE: 1/1000 Sample.

Table 8

Occupation and Industry Distributions of Rural Farm Women
by Southern and Non-Southern Residence

Industry	Per cent	
	South	Non-South
Agriculture, forestry, fisheries	.237	.280
Construction and mining	.005	.005
Manufacturing	.209	.138
Machinery	.011	.026
Transportation equipment	.002	.006
Other durable goods	.014	.024
Food and kindred products	.015	.023
Textile mill products	.043	.005
Apparel and other fabricated textiles	.104	.023
Other nondurable goods	.021	.030
Transportation, communication and other public utilities	.016	.022
Wholesale trade	.009	.014
Food and dairy products stores	.027	.022
Eating and drinking places	.028	.042
Other retail trade	.066	.061
Finance, insurance and real estate	.021	.032
Business and repair services	.003	.006
Personal services	.147	.093
Entertainment and recreation services	.002	.003
Educational services: Government	.106	.106
Private	.011	.018
Hospitals	.025	.044
Other professional and related services	.021	.036
Public administration	.033	.035
Industry not reported	.036	.041
TOTAL	1.000	1.000

Table 8 (cont.)

Occupation and Industry Distributions of Rural Farm Women
by Southern and Non-Southern Residence

Occupation	Per cent	
	South	Non-South
Professional, technical and kindred workers	.109	.128
Medical and other health workers: Salaried	.013	.023
Self-employed	.001	.001
Teachers, elementary and secondary schools	.078	.080
Other professional, technical and kindred workers: Salaried	.014	.020
Self-employed	.003	.005
Farmers and farm managers	.088	.101
Managers, officials, and proprietors, except farm	.024	.019
Salaried	.012	.011
Self-employed: Retail trade	.009	.005
Other than retail trade	.002	.003
Clerical and kindred workers	.123	.178
Secretaries, stenographers and typists	.037	.054
Other clerical workers	.086	.124
Sales workers	.061	.052
Retail trade	.058	.046
Other than retail trade	.003	.005
Craftsmen, foremen, and kindred workers	.008	.008
Operatives and kindred workers	.199	.114
Durable goods manufacturing	.017	.033
Nondurable goods manufacturing	.156	.055
Nonmanufacturing industries	.025	.025
Private household workers	.114	.067
Service workers, except private household	.085	.115
Waiters, bartenders, cooks and counter	.042	.058
Other service workers	.043	.057
Farm laborers and farm foremen	.140	.166
Laborers, except farm and mine	.005	.005
Occupation not reported	.044	.047
TOTAL	1.000	1.000

SOURCE: 1960 Census of Population, Vol. 1, Characteristics of the Population, Parts 1-53, Tables 57 and 61.

Table 9

Net** Effects of Family Status Variables on the Employment of Urban and Rural Farm Wives with Children

		Rural Farm	
	Urban*	Total Employment	Nonfarm Employment
Number of Children			
1	+.021	+.001	+.006
2	-.010	+.008	-.003
3	-.014	+.003	-.011
4	-.000	-.038	-.011
5 or more	-.012	+.016	+.030
Age of Youngest Own Child			
0-2	-.148	-.115	-.081
3-5	-.044	-.042	-.037
6-11	+.090	+.045	+.028
12-17	+.221	+.128	+.102
Grand Mean	.253	.206	.138
N	20,422	1776	
R^2	.106	.077	.076

*Sample excludes Negroes

**Other variables included are age, education, and family income minus wife's earnings.

SOURCE: 1/1000 Sample.

Table 10

Effect of Tenure on Employment of Wives of Farmers

Husband's Income Composition	Total Employment			Nonfarm Employment		
	Owners	Renters	No Cash Rent	Owners	Renters	No Cash Rent
			Gross Deviation			
Only SE	-0.7	-12.6	-4.6	-3.0	-14.7	-4.8
SE + W S	-5.3	- 0.6	-9.0	2.8	7.1	-6.3
			Net Deviation			
Only SE	0.2	-10.5	-3.8	-4.0	-12.1	-3.3
SE + W S	6.5	9.4	-7.8	4.2	15.8	-5.2
			Sample Size			
Only SE	733	81	242	733	81	242
SE + W S	155	13	52	155	13	52

For explanation, see text.

SOURCE: 1/1000 Sample.

Table 11

Multiple Classification Analysis of the
Employment During 1959 of Rural Farm Wives

	Total Employment		Nonfarm Employment	
	Gross Deviation	Net Deviation	Gross Deviation	Net Deviation
Region				
Northeast	- 0.5	0.2	4.3	1.3
North Central	- 4.4	- 1.6	- 2.5	- 2.2
South	3.1	0.2	1.1	1.8
West	5.5	5.6	3.2	0.5
Residence				
Nonmetropolitan	- 0.2	- 0.1	- 0.4	- 0.0
Metropolitan	1.4	1.6	3.0	1.0
Age				
14-19	14.7	12.5	10.0	7.9
20-24	4.6	12.4	7.8	13.4
25-29	- 3.4	3.6	- 0.4	5.4
30-34	- 2.3	5.4	- 2.3	5.1
35-39	0.1	5.0	0.0	5.1
40-44	0.6	0.7	- 0.1	- 0.5
45-49	5.6	- 0.2	2.1	- 1.9
50-54	- 3.5	-11.0	- 1.5	- 8.8
55-59	- 5.5	-12.8	- 6.2	-12.2
Race				
White, Spanish Surname	- 0.1	- 1.8	- 5.4	- 0.4
White, Other	- 2.2	- 2.6	0.3	- 0.3
Negro	26.9	31.2	- 1.4	5.0
Other	6.8	3.4	-11.1	-11.0
Education				
< 5 years	2.6	- 6.4	-14.8	-17.0
5-8	- 2.9	- 5.0	- 6.5	- 6.8
9-11	- 0.9	- 1.3	0.6	- 1.1
12	- 1.7	1.2	1.8	2.8
13-15	5.3	8.8	11.1	13.3
16+	35.3	37.0	42.5	44.4
Family Income Minus Wife's Earnings				
< $1000	5.4	5.9	- 2.0	2.1
$1000-1999	- 0.3	- 1.0	- 2.5	- 0.1
$2000-2999	1.4	2.9	0.3	2.4
$3000-3999	- 0.4	0.2	0.6	0.6
$4000-4999	2.8	2.3	3.2	0.1
$5000-7499	- 0.3	- 0.2	4.6	2.5
$7500-9999	- 7.1	- 8.4	- 1.4	- 5.2
$10,000+	-12.6	-15.6	- 8.4	-14.5

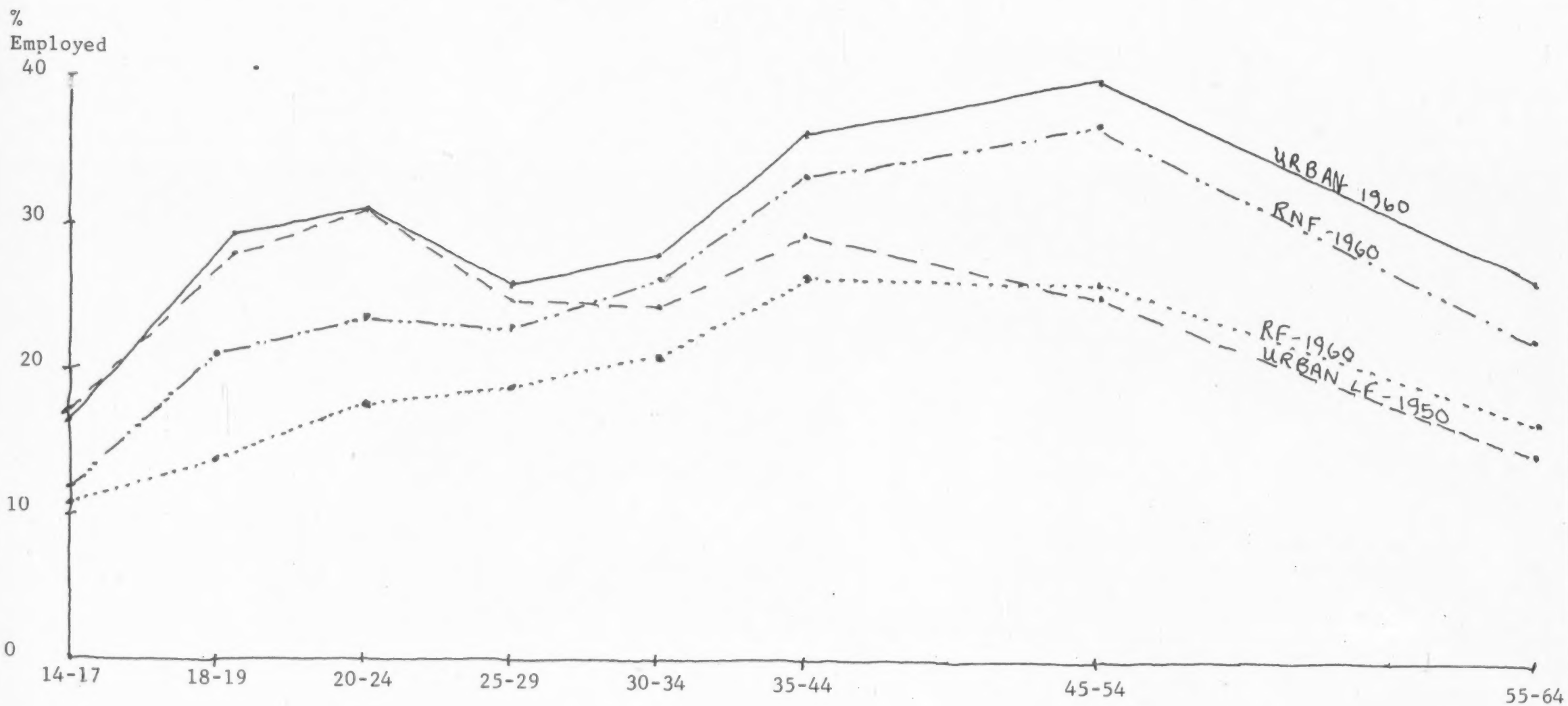
Table 11 (continued)

	Total Employment		Nonfarm Employment	
	Gross Deviation	Net Deviation	Gross Deviation	Net Deviation
Family Status				
No Children	3.7	9.4	3.4	9.1
Children				
Youngest 0-2	- 8.9	-18.0	- 7.7	-16.5
3-5	- 2.2	- 5.6	- 2.7	- 4.1
6-11	0.4	4.6	0.2	4.3
12-17	5.5	10.0	5.0	9.1
Husband's Occ.				
Professional	13.6	7.1	16.6	6.0
Other Wht. Collar	0.0	- 1.4	7.8	4.4
Craftsmen, Foreman	0.6	1.8	7.1	6.0
Operatives	2.2	3.7	7.4	7.8
Service	2.2	1.7	9.6	8.4
Nonfarm Laborer	- 3.5	- 4.5	0.7	3.6
Farmer				
Only Self-Employment Income	- 2.2	1.5	- 5.5	- 5.2
W&S & SE Income	0.2	- 7.4	- 0.8	- 4.3
No Earnings	- 3.0	- 7.3	- 1.4	- 3.0
W&S Only	14.7	15.5	20.0	19.1
Farm Laborer	11.3	5.7	3.2	4.5
Other Farm Occ.	11.8	8.9	13.6	12.0
Unemployed or not in Labor Force	- 1.6	- 3.1	- 3.9	1.0
Not Reported	- 0.8	- 0.3	- 7.9	- 8.6

SOURCE: 1/1000 Sample.

FIGURE 1

Age Pattern of Employment of Rural and Urban Women



REFERENCES

Andrews, Frank and others. 1967. Multiple Classification Analysis: A Report on a Computer Program for Multiple Regression Using Categorical Predictors. Ann Arbor: University of Michigan, Institute for Social Research.

Bancroft, Gertrude. 1958. The American Labor Force: Its Growth and Changing Composition. A volume in the 1950 Census Monograph Series. New York: John Wiley.

Blood, Robert O., Jr. and Donald M. Wolfe. 1960. Husbands and Wives: The Dynamics of Married Living. The Free Press of Glencoe, Illinois.

Bowen, William G. and T. Aldrich Finegan. 1969. The Economics of Labor Force Participation. Princeton: Princeton University Press.

Cain, Glen. 1966. Married Women in the Labor Force: An Economic Analysis. Chicago: University of Chicago Press.

Easterlin, Richard A. 1968. Population, Labor Force, and Long Swings in Economic Growth: The American Experience. New York: National Bureau of Economic Research.

_____. 1969. Towards A Socioeconomic Theory of Fertility: A Survey of Recent Research on Economic Factors in American Fertility. In S. J. Behrman, M.D., Leslie Corsa, Jr., M.D., and Ronald Freedman, Editors, Fertility and Family Planning -- A World View. Ann Arbor: The University of Michigan Press.

Long, Clarence. 1958. The Labor Force Under Changing Income and Employment. National Bureau of Economic Research. Princeton: Princeton University Press.

Miller, Herman P. 1966. Income Distribution in the United States. U.S. Bureau of the Census. A 1960 Census Monograph. Washington, D.C.: U.S. Government Printing Office.

Mincer, Jacob. 1962. Labor Force Participation of Married Women: A Study of Labor Supply. Aspects of Labor Economics. A conference of the Universities National Bureau Committee for Economic Research. Princeton: Princeton University Press.

_____. 1966. Labor Force Participation and Unemployment: A Review of the Recent Evidence. In R. A. Gordon, Editor, Prosperity and Unemployment. Berkeley: University of California Press.

Morgan, James N. and others. 1962. Income and Welfare in the United States. New York: McGraw-Hill.

_____. 1966. Productive Americans: A Study of How Individuals Contribute to Economic Growth. Ann Arbor: University of Michigan, Institute for Social Research.

Nye, F. Ivan and Lois Wladis Hoffman. 1963. The Employed Mother in America. Chicago: Rand McNally.

Oppenheimer, Valerie K. 1970. The Female Labor Force in the United States -- Demographic and Economic Factors Governing Its Growth and Changing Composition. Population Monograph Series No. 5. Berkeley: Regents of the University of California.

Orden, Susan R. and Norman M. Bradburn. 1969. Working Wives and Marriage Happiness. The American Journal of Sociology, Vol. 74, No. 4, January 1969.

Ridley, Jeanne Clare. 1959. Number of Children Expected in Relation to Nonfamilial Activities of the Wife. Milbank Memorial Fund Quarterly, Vol. 37, June 1959.

Thompson, Wilbur R. 1965. A Preface to Urban Economics. Baltimore: The Johns Hopkins University Press.

_____. 1968. Internal and External Factors in the Development of Urban Economics. Harvey Perloff and Lowden Wingo, Jr., Editors, Issues in Urban Economics. Baltimore: Johns Hopkins University Press.

Westoff, Charles F. and others. 1961. Family Growth in Metropolitan America. Princeton: Princeton University Press.

Sweet, James A. 1968. Family Composition and the Labor Force Activity of Married Women in the United States. Unpublished Doctoral Dissertation, Department of Sociology, University of Michigan.

_____. 1970. Family Composition and the Labor Force Activity of American Wives. Demography, Vol. 7, No. 2, May 1970, pp. 195-209.